CLAIMS:

1. A method comprising:

   receiving a command from a user to enter a learning mode;

   defining an event and associating therapy information with the defined event in response to the command;

   subsequently detecting the defined event; and

   providing therapy to a patient via a medical device according to the therapy information in response to the detection.

2. The method of claim 1, wherein defining an event and subsequently detecting the defined event comprise receiving indications of the event from the user.

3. The method of claim 2, wherein receiving an indication of the event from a user comprises receiving an indication of at least one of an activity and a posture undertaken by the patient from the user.

4. The method of claim 1, wherein defining an event comprises:

   monitoring an output of a sensor in response to receiving the command, the output of the sensor reflecting a physiological parameter of the patient; and

   defining the event based on the sensor output, and

   wherein subsequently detecting the event comprises:

   monitoring the output of the sensor; and

   comparing the sensor output to the defined event.

5. The method of claim 4, wherein the sensor comprises an accelerometer.

6. The method of claim 4, wherein the sensor output reflects at least one of motion and posture of the patient.

7.   The method of claim 4, wherein defining the event based on the sensor output comprises recording the sensor output over a period of time subsequent to receiving the command.

8.   The method of claim 1, wherein associating therapy information with the defined event comprises recording a value of a parameter that controls delivery of therapy by the therapy device in response to the command.

9.   The method of claim 8, wherein recording a value of a therapy parameter in response to the command comprises recording a change to the parameter made by the user subsequent to receipt of the command.

10.   The method of claim 9, wherein recording a change to the therapy parameter comprises recording changes to the therapy parameter made by the user over a period of time subsequent to receipt of the command.

11.   The method of claim 10, wherein providing therapy to a patient according to the therapy information comprises changing the therapy parameter at a time subsequent to detection of the event according to the recorded changes to the therapy parameter.

12.   The method of claim 9, wherein the medical device is an implantable medical device, and recording a change to the therapy parameter comprises receiving a change to the therapy parameter made by the user via a programming device.

13.   The method of claim 12, wherein the implantable medical device is an implantable neurostimulator, and receiving a change to the therapy parameter comprises receiving a change to at least one of a pulse amplitude, a pulse width, and a pulse rate of stimulation energy delivered by the neurostimulator.

14.   The method of claim 8, wherein recording a value of a parameter comprises receiving the value of the parameter and a time from the user, and providing therapy to a patient

according to the therapy information comprises changing delivery of therapy at a time subsequent to detection of the event according to the value and time received from the user.

15. The method of claim 1, wherein providing therapy to a patient according to the therapy information comprises suspending delivery of therapy.

16. The method of claim 1, further comprising presenting the defined event to a clinician as diagnostic data.

17. The method of claim 16, wherein presenting the defined event to the clinician comprises presenting the defined event as a marker within a timing diagram.

18. The method of claim 1, wherein the user is one of a clinician and the patient.

19. A medical device comprising:

a memory; and

a processor to receive a command to enter a learning mode from a user, define an event and associate therapy information with the defined event within the memory in response to the command, subsequently detect the defined event, and control delivery of therapy to a patient according to the therapy information in response to the detection.

20. The medical device of claim 19, wherein the processor defines the event and subsequently detects the defined event by receiving indications of the event from the user.

21. The medical device of claim 20, wherein the event comprises at least one of an activity and a posture undertaken by the patient, and the processor receives indications of the at least one of an activity and posture from the user.

22. The medical device of claim 19, further comprising a sensor that generates an output as a function of a physiological parameter of the patient, wherein the processor monitors the output of the sensor in response to receiving the command from the user, defines the event

based on the sensor output, and subsequently detects the event by monitoring the output of the sensor and comparing the sensor output to the defined event.

23. The medical device of claim 22, wherein the sensor output reflects at least one of motion and posture of the patient.

24. The medical device of claim 22, wherein the sensor comprises an accelerometer.

25. The medical device of claim 24, wherein the accelerometer comprises a multi-axis accelerometer.

26. The medical device of claim 22, wherein the processor defines the event by storing a recording of the sensor output over a period of time after receipt of the command within the memory.

27. The medical device of claim 19, wherein the therapy information comprises a value of a parameter that controls delivery of therapy to the patient, and the processor associates the value and the defined event within the memory in response to the command.

28. The medical device of claim 27, wherein the therapy information reflects a change to the parameter made by the user subsequent to providing the command, and the processor records the change and associates the recorded change with the defined event within the memory in response to the command.

29. The medical device of claim 28, wherein the therapy information reflects changes to the parameter made by the user over a period of time subsequent to providing the command, and the processor records the changes over the period of time and associates the recorded changes with the defined event within the memory in response to the command.

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30. The medical device of claim 29, wherein changes the therapy parameter at a time subsequent to detection of the event according to the recorded changes to the therapy parameter.

31. The medical device of claim 27, wherein the processor receives the value of the parameter and a time from the user, and changes delivery of therapy at a time subsequent to detection of the event according to the value and time received from the user.

32. The medical device of claim 19, wherein the processor stores the defined event within the memory as diagnostic data for presentation to a clinician.

34. The medical device of claim 32, wherein the processor presents the defined event to the clinician as a marker within a timing diagram.

35. The medical device of claim 19, wherein the processor suspends delivery of therapy in response to the detection of the previously defined event.

36. The medical device of claim 19, wherein the medical device comprises an implantable neurostimulator.

37. The medical device of claim 19, wherein the medical device comprises a programming device that communicates with an implantable medical device.

38. The medical device of claim 19, wherein the user comprises one of a clinician and the patient.

39. A computer-readable medium comprising instructions that cause a programmable processor to:

   receive a command from a user to enter a learning mode;

   define an event and associate therapy information with the defined event in response to the command;

subsequently detect the defined event; and

control delivery of therapy to a patient via a medical device according to the therapy information in response to the detection.

40.   The computer-readable medium of claim 39, wherein the instructions that cause a programmable processor to define an event and subsequently detect the defined event comprise instructions that cause a programmable processor to receive indications of the event from the user.

41.   The computer-readable medium of claim 40, wherein the instructions that cause a programmable processor to receive indications of the event from the user comprise instructions that cause a programmable processor to receive indications of at least one of an activity and a posture undertaken by the patient from the user.

42.   The computer-readable medium of claim 39, wherein the instructions that cause a programmable processor to define an event comprises instructions that cause a programmable processor to:

monitor an output of a sensor in response to receiving the command, the output of the sensor reflecting a physiological parameter of the patient; and

define the event based on the sensor output, and

wherein the instructions that cause a programmable processor to subsequently detect the defined event comprise instructions that cause a programmable processor to:

monitor the output of the sensor; and

compare the sensor output to the defined event.

43.   The computer-readable medium of claim 42, wherein the instructions that cause a programmable processor to define the event based on the sensor output comprise instructions that cause a programmable processor to record the sensor output over a period of time subsequent to receiving the command.

44. The computer-readable medium of claim 39, wherein the instructions that cause a programmable processor to associate therapy information with the defined event comprise instructions that cause a processor to record a value of a parameter that controls delivery of therapy by the therapy device in response to the command.

45. The computer-readable medium of claim 44, wherein the instructions that cause a programmable processor to record a value of a therapy parameter comprises instructions that cause a programmable processor to record a change to the parameter made by the user subsequent to receipt of the command.

46. The computer-readable medium of claim 45, wherein the instructions that cause a programmable processor to record a change to the parameter comprises instructions that cause a programmable processor to record changes to the therapy parameter made by the user over a period of time subsequent to receipt of the command.

47. The computer-readable medium of claim 46, wherein the instructions that cause a programmable processor to provide therapy to a patient according to the therapy information comprise instructions that cause a programmable processor to change the therapy parameter at a time subsequent to detection of the event according to the recorded changes to the therapy parameter.

48. The computer-readable medium of claim 44, wherein the instructions that cause a programmable processor to record a value of a parameter comprise instructions that cause a programmable processor to receive the value of the parameter and a time from the user, and the instructions that cause a programmable processor to provide therapy to a patient according to the therapy information comprise instructions that cause a programmable processor to change delivery of therapy at a time subsequent to detection of the event according to the value and time received from the user.

49. The computer-readable medium of claim 39, wherein the user is one of a clinician and the patient.